CLAIMS

What is claimed is:

1.   1.   A method comprising:

    2.   storing a first list of hardware registers;

    3.   receiving video data at an application program;

    4.   receiving a second list of hardware registers from a device driver;

    5.   determining whether the first list of hardware registers matches the

    6. second list of hardware registers; and

    7.   if so, streaming the video data to a video decoder.

1   2.   The method of claim 1 further comprising precluding the streaming of the

2   video data to the video decoder if the first list of hardware registers does not

3   match the second list of hardware registers.

1   3.   The method of claim 1 further comprising:

2   initializing the device driver upon startup of a computer system

3   forwarding the first list of hardware registers from the device driver to a

4   first security module; and

5   verifying, at the first security module, a digital signature of the device

6   driver prior to storing the first list of hardware registers.

1   4.   The method of claim 3 further comprising encrypting the first list of

2   hardware registers prior to storing the first list of hardware registers.

1   5.   The method of claim 1 further comprising:

2   the application program calling an interface upon receiving the video

3   data;

4   the interface requesting the second list of hardware registers from the

5   device driver; and

6   mapping the second list of hardware registers to a virtual resource map

7   that is accessible by the application.

1   6.   The method of claim 5 further comprising:

2   the interface calling a second security module to verify the second list of

3   hardware registers; and

4   the second security module calling the first security module in order to

5   verify the virtual resource map.

1   7.   The method of claim 6 further comprising verifying, at the second security

2   module, a digital signature of the interface prior to calling the first security

3   module.

1   8.   The method of claim 7 wherein the second security module calls the first

2   security module via a secure link.

1   9.   A computer system comprising:

2   a player application that receives data content;

3   a decoder that stores and decodes the data content received at the player,

4   the decoder including hardware registers to store the data content;

5   a driver, coupled to the decoder, that allocates the hardware registers

6   within for access by the player application; and

7   a first security module, coupled to the driver, that secures a first list of

8   resources corresponding to the hardware registers to prevent unauthorized

9   access of the data content within the hardware registers.

1   10.   The computer system of claim 9 wherein the first security module verifies

2   the integrity of the driver via digital signatures prior to receiving the first list of

3   resources.

1   11.   The computer system of claim 9 further comprising an interface, coupled

2   to the player application, the driver and the decoder, that decrypts the content

3   the data content prior to the data content being stored in the hardware registers.

1   12.   The computer system of claim 11 wherein the driver verifies the integrity

2   of the interface via digital signatures and public/private key technologies.

1   13.   The computer system of claim 11 further comprising a second security

2   module coupled to the interface and the first security module.

1   14.   The computer system of claim 13 wherein the second security module

2   receives a second list of resources from the interface whenever the player

3   application is to release the data content from the hardware registers.

1 15. The computer system of claim 14 wherein the second security module

2 retrieves the first list of resources from the first security module and compares

3 the first list of resources to the second list of resources.

1 16. The computer system of claim 15 wherein the data content is released

2 from the hardware registers if the second list of resources matches the first list of

3 resources.

1 17. The computer system of claim 13 wherein the connection between the first

2 security module and the second security module is secured by a random number

3 secret key system.

1 18. An article of manufacture including one or more computer readable

2 media that embody a program of instructions, wherein the program of

3 instructions, when executed by a processing unit, causes the processing unit to:

4   store a first list of hardware registers;

5   receive video data at an application program;

6   receive a second list of hardware registers from a device driver;

7   determine whether the first list of hardware registers matches the second

8 list of hardware registers; and

9   if so, stream the video data to a video decoder.

1 19. The article of manufacture of claim 18 when executed by a processing

2 unit, further causes the processing unit to preclude the streaming of the video

3   data to the video decoder if the first list of hardware registers does not match the

4   second list of hardware registers.

1   20.   The article of manufacture of claim 18 when executed by a processing

2   unit, further causes the processing unit to:

3   initialize the device driver upon startup of a computer system

4   forward the first list of hardware registers from the device driver to a first

5   security module; and

6   verify, at the first security module, a digital signature of the device driver

7   prior to storing the first list of hardware registers.

1   21.   The article of manufacture of claim 20 when executed by a processing

2   unit, further causes the processing unit to encrypt the first list of hardware

3   registers prior to storing the first list of hardware registers.

1   22.   The article of manufacture of claim 18 when executed by a processing

2   unit, further causes:

3   the application program to call an interface upon receiving the video data;

4   the interface to request the second list of hardware registers from the

5   device driver; and

6   mapping the second list of hardware registers to a virtual resource map

7   that is accessible by the application.

1   23.   The article of manufacture of claim 22 when executed by a processing

2   unit, further causes:

3   the interface to call a second security module to verify the second list of

4   hardware registers; and

5   the second security module to call the first security module in order to

6   verify the virtual resource map.

1   24.   The article of manufacture of claim 23 when executed by a processing

2   unit, further causes verifying, at the second security module, a digital signature

3   of the interface prior to calling the first security module.